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STATE OF MONTANA

BULLETIN

OF THE

Department of Public Health

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January 15, 1915.

Nos. 8-9.

MONTANA STATE BOARD OF HEALTH.

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HELENA, MONTANA.

Published Monthly at Helena, by the State Board of Health.
"The science of disease prevention, if properly applied, can add fifteen years to the present average length of human life."—Prof. Irving Fisher, Yale.

This Bulletin will be mailed monthly to any person in Montana upon request mailed to the Secretary of the State Board of Health at Helena.

INDEPENDENT PUBLISHING CO.
HELENA, MONTANA



Molana Public Wall

Owing to the rush of work last month we did not issue the December Bulletin, therefore, statistics for both November and December, 1914, will be found in this number.

It may be interesting to compare Montana's death rate for 1912, with the death rate in the other States which are in the registration area. The following table shows these rates, per 1,000 population:

California	13.2
Colorado	12.2
Connecticut	14.3
Indiana	12.4
Kentucky	13.2
Maine	12.6
Maryland	15.7
Massachusetts	14.7
Michigan	12.6
Minnesota	9.8
Missouri	12.6
Montana	11.5
New Hampshire	13.6
New Jersey	14.5
New York	15.2
Ohio	12.7
Pennsylvania	14.1
Rhode Island	15.4
Utah	10.6
Vermont	12.2
Washington	8.7
Wisconsin	10.8

DEATHS (EXCL. OF STILLBIRTHS) REPORTED TO THE STATE BOARD OF HEALTH FOR THE MONTH OF NOVEMBER, 1914, ARRANGED ACCORDING TO COUNTIES AND PRINCIPAL CITIES.

	Spotted Fever	Small Pox.	Tuberculosis	Diphtheria	Scarlet Fever	Measles	Typhoid Fever		Whooping Cough		Nephritis	Organic Heart Disease	Malignant Tumors	Acute Intestinal Diseases	Violence	Suicide	Alcoholism	All Other Causes	Totals
Beaverhead Broadwater Carbon Cascade (Excl. of) Great Falls Chouteau Custer Dawson Deer Lodge (Excl. of) Anaconda Fergus Flathead (Excl. of) Kalispell Gallatin (Excl. of) Bozeman Granite Jefferson Lewis & Clark (Excl. of) Helena Lincoln Madison Meagher Missoula (Excl. of) Missoula (Excl. of) Livingston Powell Ravalli Rosebud Sanders Silver Bow (Excl. of) Butte Sweet Grass Teton Valley Yellowstone (Excl. of) Billings Blaine Big Horn Fallon Hill Mineral Richland Sheridan Stillwater Toole Wibaux Totals		13	5 11 1			1	i			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					1 1 1	1111		22 85 44 3 11 11 11 22 23 33 33 11 12 22 24 44 31 14 31 44 31 11 11 11 11 11 11 11 11 11 11 11 11	14 11 12 3 8 8 2 14 9 10 11 1 1 1 3 3 5 8 8 6 2 2 5 17 2 4 4 3 6 6 6 2 4 2 2 2

Estimated population—420,000.

Monthly Death Rate per 1,000 Population—.790.

Annual Death Rate per 1,000 Population—9.48.

DEATHS (EXCLUSIVE OF STILLBIRTHS) REPORTED TO THE STATE BOARD OF HEALTH FOR THE MONTH OF DECEMBER, 1914, ARRANGED ACCORDING TO COUNTIES AND PRINCIPAL CITIES.

	Spotted Fever	Small Pox	Tuberculosis	Diphtheria	Scarlet Fever	Measles	Typhoid Fever	Meningitis	Whooping Cough	Pneumonia	Nephritis	Organic Heart D{sease	Malignant Tumors	Acute Intestinal Diseases	Tiolence	Suicide	Alcoholism	All Other Causes		Totals
Beaverhead Broadwater Carbon Cascade (Excl. of). Great Falls Chouteau Custer Dawson Deer Lodge (Excl. of) Anaconda Fergus Flathead (Excl. of) Kalispell Gallatin (Excl. of) Bozeman Granite Jefferson Lewis and Clark (Excl. of Helena Lincoln Madison Meagher Missoula (Excl. of) Missoula (City Musselshell Park (Excl. of) Livingston Powell Ravalli Rosebud Sanders Silver Bow (Excl. of) Butte Sweet Grass Teton Valley Yellowstone (Excl. of) Billings Big Horn Blaine Fallon Hill Richland Sheridan Stillwater Toole		1			1	 				$\begin{bmatrix} 1 \\ 1 \\ \end{bmatrix}$ $\begin{bmatrix} 1 \\ 2 \\ 3 \\ 3 \\ 2 \end{bmatrix}$ \vdots \vdots $\begin{bmatrix} 1 \\ 4 \\ 2 \\ \\ 3 \\ 2 \end{bmatrix}$ $\begin{bmatrix} 3 \\ 2 \\ 3 \\ 2 \end{bmatrix}$		$\begin{bmatrix} & \cdot & \cdot & \cdot & 1 \\ & 2 & \cdot & \cdot & 1 \\ & & 1 & 1 \\ & & & \cdot & 1 \\ & & & 1 & 1 \\ & & & 1 & 1 \\ & & & 1 & 1$		111111111111111111111111111111111111111	1 1 2 1 2 			$\begin{array}{c} .38837136456311221\\ .244262193311142111725255\\243663\\ \end{array}$		3 5 1 4 9 2 9 5 8 8 6 1 1 1 1 3 9 9 9 8 6 6 1 2 2 2 1 7 7 7 7 7 7 7 7 7 7 7 7 8 8 4 4 4 4 4 4
Totals	1	. 1	34	3	1		7	1		68	21	49	24	9	29	7	5	14	9	408

Estimated Population—420,000. Annual Death Rate per 1,000 Population—11.65. Monthly Death Rate per 1,000 Population—.971.

BIRTHS (EXCL. OF STILLBIRTHS*) REPORTED TO THE STATE BOARD OF HEALTH FOR THE MONTH OF NOVEMBER, 1914, AND COMPARATIVE BIRTH AND DEATH RECORD IN THE STATE.

	Males	Females	Totals	Deaths	Excess of Births	Excess of Deaths
Beaverhead Broadwater Carbon Cascade, Excl. of Great Falls Chouteau Custer Dawson Deer Lodge Excl. of Anaconda Fergus Flathead Excl. of Kalispell Gallatin Excl. of Bozeman Granite Jefferson Lewis and Clark Excl. of Helena Lincoln Madison Meagher Missoula Excl. of Livingston Powell Ravalli Rosebud Sanders Silver Bow Excl. of Butte Sweet Grass Teton Valley Yellowstone Excl. of Billings Blaine Big Horn Fallon Hill Mineral Richland Sheridan Stillwater Tooole Wibaux Totals	72 211 199 133 200 177 166 414 42 24 43 266 666 664 412 21 12 41 13 11 18 81 31 11 11 11 11 11 11 11 11 11 11 11 11	5 6 6 24 25 23 25 19 16 6 25 19 6 6 2 2 8 7 7 4 8 8 8 5 10 15 15 3 3 12 11 12 15 16 23 3 12 14 4 8 2 1 5 10 10 10 10 10 10 10 10 10 10 10 10 10	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{bmatrix} 3 & 4 & 4 & 4 \\ 4 & 144 & 124 \\ 112 & 28 & 29 \\ 114 & 111 \\ 111 & 33 & 33 & 66 \\ 22 & 466 & 21 \\ 24 & 466$	9 9 4 4 311 333 229 155 211 32 244 6 6 27 32 22 4 6 6 27 33 22 18 13 14 28 15 5 5 39 14 13 15 5 5 39 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	13

BIRTHS (EXCLUSIVE OF STILLBIRTHS REPORTED) TO THE STATE BOARD OF HEALTH FOR THE MONTH OF DECEMBER, 1914, AND COMPARATIVE BIRTH AND DEATH RECORD IN THE STATE.

Beaverhead		Males	Females	Totals	Deaths	Excess of Births	Txcess of Deaths
Totals	Broadwater Carbon Cascade Excl. of Great Falls Chouteau Custer Dawson Deer Lodge Excl. of Anaconda Fergus Flathead Excl. of Kalispell Gallatin Excl. of Bozeman Granite Jefferson Lewis and Clark Excl. of Helena Lincoln Madison Meagher Missoula Excl. of Missoula Excl. of Livingston Powell Ravalli Ravalli Rosebud Sanders Silver Bow Excl. of Butte Sweet Grass Teton Valley Yellowstone Excl. of Billings Big Horn Blaine Fallon Hill Mineral Richland Sheridan Stillwater Toole Wibaux	33 222 11 25 8 10 20 11 19 12 2 6 6 8 8 1 1 2 2 6 6 8 1 1 2 2 6 6 8 1 1 2 2 6 6 7 4 4 1 6 6 7 4 4 1 6 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	54 44 299 9 9 122 122 3 9 9 9 8 8 6 6 3 22 1 1 4 4 122 1 7 7 7 5 5 1 5 6 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	86 266 155 177 222 322 322 144 155 187 77 77 281 131 144 155 144 155 164 177 187 187 187 187 187 187 187 187 187	144 99 299 58 88 188 188 189 99 111 12 25 53 110 77 44 23 31 170 55 88 44 99 51 11 11 11 11 11 11 11 11 11 11 11 11	3 1 1 2 1 6 2 5 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

COMMUNICABLE DISEASES REPORTED TO THE STATE BOARD OF HEALTH FOR THE MONTH OF NOVEMBER, 1914.

Smallpox:—Chouteau, 2; Fergus, 1; Gallatin (Excl. of Bozeman) 1; Hill, 1; Jefferson, 1; Helena, 5; Madison, 27; Meagher, 3; Missoula (Excl. of Missoula City), 2; Missoula City, 15; Park (Excl. of Livingston), 1; Sheridan, 1; Silver Bow (Excl. of Butte), 11'; Butte, 2; Sweet Grass, 46; Billings, 2; Total, 121; Total last month, 31.

Diphtheria—Great Falls. 2; Custer, 10; Dawson, 1; Anaconda, 2; Flathead (Excl. of Kalispell), 2; Gallatin (Excl. of Bozeman), 1; Helena, 1; Powell, 1; Ravalli, 1; Richland, 1; Sheridan, 6.. Butte, 5; Total, 33: Total last month, 39.

SCARLET FEVER—Great Falls, 2; Chouteau, 19; Custer, 3; Gallatin (Excl. of Bozeman), 1; Hill,, 9; Lewis and Clark (Excl. of Helena), 3; Lincoln. 3; Mineral, 4; Park, (Excl. of Livingston), 1; Sheridan, 4; Stillwater, 7; Valley, 6; Wibaux 1; Billings, 1; Total, 64; Total last month, 52.

Typhoid Fever—Blaine, 13; Cascade (Excl. of Great Falls) 2; Great Falls, 5; Chouteau, 1; Dawson, 8; Fergus, 4; Kalispell, 3; Gallatin (Excl. of Bozeman) 1; Hill, 9; Madison, 1; Missoula City, 1; Ravalli, 2; Sanders, 1; Stillwater, 1; Teton, 1; Wibaux, 5; Yellowstone, 1; Billings, 2; Total, 61; Total last month, 89.

Measles—Fergus, 1; Hill, 1; Helena, 1; Mineral, 1; Ravalli, 1; Teton, 1; Total, 6. Total last month, 8.

Meningitis-No cases. Last month, 2.

Tuberculosis—Blaine, 1; Sanatorium, 6; Fergus, 1; Hill, 2; Butte, 15; Total, 25. Total last month, 26.

Whooping Cough—Fergus, 1; Total, 1; Total last month, o. Anterior Poliomyelitis—Fergus, 1; Total 1; Total last month, 1.

*One case of smallpox reported from Silver Bow county was a city case confined at the Pest House.

COMMUNICABLE DISEASES REPORTED TO THE STATE BOARD OF HEALTH FOR THE MONTH OF DECEMBER, 1914.

Smallpox—Blaine, I; Chouteau, 6; Gallatin (Excl. of Bozeman), I; Helena, 2; Madison, 26; Meagher, 3; Missoula (Excl. of Missoula City), 7; Missoula City, 16; Musselshell, 6; Sheridan, I; Silver Bow, (Excl. of Butte), 13; Butte, 5; Sweet Grass, 2; Valley, I: Total, 90; Total last month, 121.

Diphtheria—Great Falls, 2; Custer, 2; Dawson, 5; Anaconda, 2; Flathead (Excl. of Kalispell), 5; Gallatin (Excl. of Bozeman), 2; Hill, 2; Livingston, 1; Ravalli, 2; Rosebud, 1; Sheridan, 5; Butte, 6; Toole, 1; Total, 36. Total last month, 33.

Scarlet Fever—Blaine, 2; Carbon, 1; Chouteau, 1; Great Falls, 2; Custer, 3; Dawson, 1; Hill, 6; Lincoln, 2; Mineral, 1; Park, (Excl. of Livingston), 2; Livingston, 10; Richland, 4; Sheridan, 2; Silver Bow, (Excl. of Butte), 1; Stillwater, 5; Toole, 1; Valley, 7; Billings, 1; Total, 52. Total last month, 64.

Typhoid Fever—Blaine, 3; Cascade (Excl. of Great Falls), 1; Great Falls. 4; Custer, 1; Dawson, 3; Fergus. 2; Gallatin (Excl. of Bozeman), 1; Lincoln, 1; Madison, 1; Meagher, 2; Musselshell, 1; Teton. 1; Wibaux, 3; Yellowstone (Excl. of Billings) 1; Total, 25; Total last month, 61.

Measles—Park (Excl. of Livingston), 2; Livingston, 5; Ravalli, 3; Butte, 1; Stillwater, 1; Sweet Grass, 1; Yellowstone (Excl. of Billings), 2; Billings, 1; Total, 16. Total last month, 6.

Whooping Cough—Fergus. 1; Total, 1; Total last month, 1. Tuberculosis—Blaine, 1; Custer, 5; Flathead (Excl. of Kalispell), 2; Kalispell, 1; Lincoln. 1; Butte, 3; Total, 13. Total last month, 25.

DIVISION OF FOODS AND DRUGS.

Laboratory Report.

Classification	Legal	Adulter- ated	 Unofficial	Mis- branded	Total
Milk Butter (Dairy Com.) Ice Cream Water Cream (Dairy Com.) Sewage (Bozeman Testing Station)	42 1 2 	21 12 1 	1 1 1 	·· · · · · · · · · · · · · · · · · · ·	64 15 4 31 1
Total	45	34	3	2	124

Since the last laboratory report was published one hundred twenty-four samples of foods, water and sewage have been reported to the State Board of Health and the State Dairy Commission. Sixty-four milk samples were examined and details of the reports are published in this report. Fifteen samples of butter were analyzed. Twelve of these butter samples were adulterated and two were misbranded. The butter samples were bought in the following cities: Anaconda and Butte.

Thirty-one samples of water and nine samples of sewage were examined bacteriologically and chemically. The sewage samples were taken from the Bozeman Testing Station. The thirty-one samples of water were collected in the following cities: Ballantine, Billings, Bynum, Chinook, Geyser, Glacier Park, Harlem, Harlowton, Judith Gap, Kalispell, Miles City, Moore, Proctor, Raynsford, Toston and Worden.

With the information obtained by sanitary surveys and by laboratory examinations twelve of the above supplies were pronounced good; thirteen of suspicious quality and further sampling recommended and six were pronounced bad.

MILK Standard or Above.

Lab. No. Date Obtained from	Town	Fat. Solids not fat Total Solids
11	Red Lodge Red Lo	20.57 8.57 12.0 12.04 8.54 3.5 13.95 9.75 4% 13.58 9.28 4.3 12.58 9.98 3.6 12.58 9.98 3.6 12.56 9.06 3.5 12.59 9.09 3.5 18.75 8.75 10.0 12.58 9.98 3.6 12.58 9.98 3.6 12.58 9.98 3.6 12.58 9.98 3.6 12.58 9.98 3.6 12.58 9.98 3.6 12.58 9.98 3.6 14.06 9.26 4.8 15.68 9.18 6.5 12.87 9.27 3.6 13.14 9.34 3.7 13.14 9.34 3.7 13.14 9.14 4.0 12.48 8.88 3.6 13.21 9.21 4.0 14.64 9.54 5.1 14.98 9.23 5.75 14.98 9.23 5.75 13.95 9.05 4.9 12.82 9.32 3.5 13.54 9.34 4.2 13.31 9.66 4.25 13.17 9.37 3.8 12.88 9.18 3.7 12.48 9.18 3.3 14.52 9.52 5.2 14.52 9.52 5.2

MILK. Below Standard.

Lab. No. Date Obtained from	Town	Remarks
3865 11- 9-14 Columbus Cafe 3866 11- 9-14 Quinn Restaurant 3871 11- 9-14 Mrs. Sarah Collins 3875 11-10-14 P. H. Madsen 3880 11-10-14 J. J. Quinlan	Columbus Columbus Red Lodge Red Lodge Forsyth	Low in fat. Low in fat. Low in fat. Low in solids
3883 11–10–14 F. E. Burkholder 3889 11–19–14 Mathing & Reardon 3892 11–14–14 Brockawoog	Forsyth Joliet Mues City	Low in fat. Low in fat and
3893 11-14-14 John Barth	Miles City Miles City	solids not fat.
3895 11–14–14 W. S. Ingham	Baker	solide not fot
3900 11-19-14 C. L. Sargent	Baker	Low in fat and
3902 11-19-14 John Ryan	Baker Baker	
3904 11-16-14 Mrs. N. M. McLeod 3908 11-20-14 Haupt & Toff 3910 11-21-14 Vienna Cafe 3915 11-21-14 Fah & Kuhne 3918 11-30-14 Chas. Burroughs 3920 11-26-14 Gus Chryst 3923 12-11-14 Joseph Charette 3920 3920 11-14 3920	Lewistown Three Forks	Low in fat. Low in fat. Low in fat. Low in fat.

ICE CREAM. Standard or Above.

Lab. No. Date Obtained from	Fat	Remarks
D.157 11- 7-14 Nembro Drug Co., Butte	14.25% 17. %	Standard.

ICE CREAM. Below Standard.

Lab. No. Date	Obtained	from	Remarks
D.166 11–15–14 Ph	nil Daniels,	Anaconda	Low in fat.

HOUSEWIVES SHOULD BUY CHICKENS UNDRAWN.

Government Tests Show That Undrawn Chickens Keep Much Better Than Those That Have Been Fully Dressed.

Washington, D. C.—The poultry handling specialists of the U. S. Department of Agriculture are urging housewives to buy their chickens undrawn and with their heads and feet still on. An undrawn chicken, they say, shows its lack of freshness or its unfitness for food much more clearly than does a fully dressed bird, in the dressing of which certain significant signs can easily be removed by the crafty poultry dresser.

Moreover, by actual government tests as reported in Circular No. 70 of the Bureau of Chemistry, fully drawn poultry with head and feet removed, decompose the most rapidly, while undrawn poultry keeps much better than does poultry either wholly or partly drawn. This is because once a chicken is opened for cleaning, the delicate tissues in it are open to the bacteria of the air, which multiply very rapidly and soon destroy the flavor of the chicken, even if they do not bring about actual putrefaction. The undressed chicken is far less likely to be contaminated in this way, as the outer skin is a protection against the inroads of such bacteria.

When the feet of chickens are removed, the housewife loses one of the easiest methods of determining whether the bird is young or old. Young chickens have smooth, clean feet and shanks. Old birds have scaly, rough legs and buttons or spurs. The head of a dead chicken gives very clear indications of staleness. The head of a chicken that is not fresh will show a greenish color below the bill, sunken eyes, a darkening or discoloration on the neck, all of which indicate decay.

The housewife should require that the entrals of a chicken be not drawn, or at least should have the butcher draw them in her presence. Moreover, the entrals of the chicken often show diseased conditions that are not evident after the bird is fully drawn. The appearance of the entrals will help her to tell whether the chicken is fresh and whether it has been properly handled. Entrails in a good chicken should be almost empty, round, firm in texture, and showing little red veins here and there. If the intestines are full the bird was not starved for 24

hours before killing, as it should have been, or else sand was fed to it to increase its weight and work a fraud on the buyer. If the animal heat was not removed quickly and completely, the roundness of the intestines will be lost and the folds of the intestines will stick together. There will also be an undue amount of sliminess and unpleasant odor which is not found in a properly chilled bird. There is, of course, always some odor when the body cavity of a bird is opened, even if it is just killed, but this odor is quite different from the pronounced smell which comes with decay. An unscrupulous dealer cannot foist bad birds on the housewife who dresses the chickens herself and knows how to interpret what she sees and smells.

The skin of a chicken will tell the housewife whether the bird has been properly "dry" picked and "air chilled," or whether it has been "scalded" in order to remove the feathers. The skin of a dry picked chicken is flexible, translucent, with the feather papillae plainly visible and short hairs which have to be removed by singeing. If a chicken has been scalded the skin is hard, thick, close to the muscles underneath and almost free from these hairs. The skin of a dry picked chicken which has been chilled in water has lost the powdery look which is characteristic, and is shiny, thicker than when air cooled, and it is scarcely possible to see the pink muscles underneath as one should be able to do. A water chilled chicken is also a fraud to the buyer because it absorbs water, which is charged for at chicken prices.

Housewives should insist upon a dry-picked chicken, because any wetting of a chicken, and especially scalding, lessens or destroys the delicate flavor of the meat.





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